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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,143	11/18/2003	Kevin M. Durocher	GERD:0008-1YOD RD-27829-	5293
7590	06/20/2006		EXAMINER VIGUSHIN, JOHN B	
Patrick S. Yoder FLETCHER YODER P.O. Box 692289 Houston, TX 77269-2289			ART UNIT 2841	PAPER NUMBER

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/716,143

Applicant(s)

DUROCHER ET AL.

Examiner

John B. Vigushin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 30-36 and 38-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-32, 34-36 and 38-52 is/are allowed.
- 6) ☒ Claim(s) 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

1. The present Office Action is responsive to Applicant's Amendment filed March 23, 2006. The Examiner acknowledges the amendments to Claims 30, 33 and 36, and the cancellation of Claim 37. Claims 30-36 and 38-52 remain pending in the instant amended Application.

#### **Rejections Based On Prior Art**

2. The following references were relied upon for the rejections hereinbelow:

Bientz (US 5,340,640)

Kosowsky (US 2003/0079910 A1)

Grise et al. (US 4,485,297)

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 33 is rejected under 35 U.S.C. 102(b) as being anticipated by Bientz.

Bientz discloses: a flexible substrate 1 (col.2: 67-68); a metal carbide 2 (e.g., titanium carbide) formed on the flexible substrate 1 (col.2: 68-col.3: 1; col.3: 5-8 and 26-

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32; col.4: 16-20 and 22-32) having a first end (corresponding to contact 4; Figs. 1 and 3) and a second end (corresponding to another contact 4; Figs. 1 and 3); and conductive terminals (contacts 4) coupled to each of the first end and the second end (Figs. 1 and 3; col.3: 5-8).

5. Claim 33 is rejected under 35 U.S.C. 102(b) as being anticipated by Grise et al.

Grise et al. discloses, in Figs. 1, 2 and 3: a flexible substrate 12 (col.1: 20-23; col.2: 23-27); a metal carbide 18 (col.2: 23-27 and 48-57; col.2: 65-col.3: 3) formed on the flexible substrate 12 and having a first end and a second end (at a point on stripes 14 to which metal carbide bars 18 are electrically connected; col.2: 36-38; col.4: 48-51); and conductive terminals 22 coupled to each of the first and the second end of metal carbide 18 (by way of metal carbide stripes 14, on which the conductive terminals 22 are mounted, the metal carbide bars 18 extending between and electrically connected to the metal carbide stripes 14; col.2: 36-38; col.3: 9-11; col.4: 48-51). [Examiner's Note: although not required by Applicant's instant amended Claim 33, the metal carbide bars 18 happen to constitute a resistive region; col.2: 23-28 and 36-38; col.3: 60-col.4: 10].

6. Claim 33 is rejected under 35 U.S.C. 102(e) as being anticipated by Kosowsky. Kosowsky discloses, in Fig. 3F: a flexible substrate 10 (paragraphs [0076], [0089] and [0101]); a metal carbide (e.g., tantalum carbide; paragraph [0084]) formed on the flexible substrate—i.e., the flexible substrate 10 is a voltage switchable dielectric material (VSDM) formed from a mixture comprising conductive particles, powders, or filaments, e.g., a metal carbide such as tantalum carbide, the metal carbide therefore inherently “formed on the flexible substrate” because it is incorporated as a compositional

component of the flexible substrate (paragraphs [0082] and [0084])--and having a first end and a second end; and conductive terminals (i.e., the terminal ends of traces 35 are inherent in a patterned circuit, not shown in any of the Figures, since all depicted views in the Figures are cross-sectional) coupled to each of the first end and the second end (i.e., the beginning and end of any given trace 35 is coupled to each of a first end and second end of the metal carbide formed on flex substrate 10).

***Allowable Subject Matter***

7. Claims 30-32, 34-36, 38-41 and 42-52 have been allowed.

***Response to Arguments***

8. Applicant's position regarding the amendment to Claim 33 on p.5 in the Remarks filed March 23, 2006 has been fully considered but is not persuasive. The Applicant has chosen to amend Claim 33 such that, as the Applicant would have it, the amended claim "simply provides an alternate combination of allowable subject matter, as indicated by the Examiner." The Examiner respectfully disagrees and points out that the Applicant's "alternate combination" constitutes a considerable broadening of scope. Gone from the currently amended Claim 33 are "the resistive region" or any other "region," compositional or electrical characteristic that in any way limits "a metal-carbide formed on the flexible substrate," as currently claimed. Accordingly, Claim 33, as amended, does not constitute allowable subject matter as indicated by the Examiner in the previous Office Action and, as shown by the Examiner's rejections of the claim set

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forth in the present Office Action, does not contain any allowable subject matter over the prior art.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Vigushin whose telephone number is 571-272-1936. The examiner can normally be reached on 8:30AM-5:00PM Mo-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
John B. Vigushin  
Primary Examiner  
Art Unit 2841

jbv  
June 10, 2006